

NOTES ON ASIAN LAURACEÆ

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RÉSUMÉ : Quelques nouveautés taxonomiques et nomenclaturales dans les Lauracées du sud-est asiatique.

ABSTRACT: Some new taxa and combinations in the *Lauraceæ* from South-East Asia.

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Alseodaphne cavaleriei (Lév.) Kostermans

Candollea 28 : 104 (1973).

— *Nothaphæbe poilanei* LIOU HO, Laur. Chine et Indoch. 77 (1932, 1934), *syn. nov.*, typus : *Poilane* 17924, L, P; paratypus : *Poilane* 17915, L, P.

LÉVEILLE's plant was from Yunnan, Gan Chouen, whereas POILANE'S specimens are from Cana, prov. Phanrang, Annam. Both collections agree perfectly.

Alseodaphne glaucina (A. Chev. ex Liou Ho) Kostermans, *comb. nov.*

— *Machilus glaucina* A. CHEV. ex LIOU HO, Laur. Chine et Indoch. 59 (1932, 1934); HILL, Index Kew, Suppl. 9 : 168 (1938) ("*glaucinus*"); KOSTERMANS, Bibl. ; 908 (1964).

TYPUS : *Chevalier* 38873, L, P.

Alseodaphne hainanensis Merrill

Lingnan Sc. J. 13 : 57 (1934); TANAKA & ODAHIMA, J. Trop. Agr. Formosa 366 (1938); CHOW & WANG, Cat. Pl. Kwangsi : 21 (1955) (Chinese); CHUN & al., Fl. Hainanica I : 265, tab. 1 (1964); KOSTERMANS, l.c. : 68; Candollea 28 : 11 (1973).

TYPUS : *Tsang & Fung* 766 = *L.U.* 18300, A, BO, DD, K, L.

CHINA : HAINAN : fl., *How* 73314, A, SING, July, buds, *How* 73137, BO, SING; Po-ting, alt. 500 m, Sept., young fr., *How* 73643, BO, G, SING; Oct., fr., *Wang* 34714, BO, NY; VIET-NAM : TONKIN: Chapa, alt. 1700 m, Aug., fl., *Pételot* 3809, BO, NY. — ANNAM : Nha-trang, massif of Hon-ba, 1000-1250 m alt., fl., *Chevalier* 38873 L, P; 38877, P.

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Alseodaphne griffithii Kostermans, sp. nov.

Arbor, ramulis gracilibus glabris, gemmis terminalibus apicem versus minute griseo-sericeis. Folia alternantia, aggregata, chartacea, glabra, oblonga, obtusa vel breve acuta, basin versus attenuata, acuta, utrinque minute prominulo-reticulata, supra nervo mediano impresso, nervis laterilibus utrinque gracilibus prominulis, erecto-patentibus, petiolo sat gracili. Panicle axillares, glabres, graciles, multiflorae, pedicellis filiformibus. Flores glabri, tuba perianthii cupuliformi, nec profundo, tepalis ovatis, acutis, intus sericeis, anthers 4-locellatis, loculis basalibus majoribus, filamentis sat gracilibus glabris, duplo longioribus, loculis antherarum exteriorum introrsum, interiorum extrorsum, glandulis basalibus magnis, breve stipitatis, staminodis late hastatis brevissime stipitatis, ovario ellipsoideo, glabro, stylo gracili, exserto, stigmate inconspicui.

TYPUS : Griffith K.D. 4273, K.

Tree, branchlets glabrous, smooth, terminal bud towards the apex, densely, minutely grey-sericeous. Leaves spirally arranged, aggregate, thinly chartaceous, glabrous, oblong, $3 \times 9.4 \times 17$ cm, rounded or shortly acute, base gradually tapered, acute, both surfaces densely prominently reticulate, the slender, erect-patent, arcuate nerves prominent, above midrib impressed, below prominent. Petioles rather slender, 1-1.5 mm long, concave above.

Panicles axillary, glabrous, many-flowered, slender, up to 12 cm long, bracts caducous. Pedicels filiform, 3-5 mm long. Flowers glabrous, perianth tube cup-shaped, shallow, tepals subequal, thin, ovate, acute, 2.5 mm long, inside sericeous. Stamens 2 mm (inner whorl slightly shorter), anthers broadly elliptic, 4-celled, filaments glabrous, twice as long as the anthers. Cells of whorl I and II introrse, of whorl III extorse, basal glands large, shortly stipitate. Staminodes broadly hastate, very shortly stipitate. Ovary ellipsoid, glabrous, style slender, as long with inconspicuous stigma.

Near *A. birmanica*, but the midrib impressed, the panicles and flowers glabrous.

BIRMA : Mergui, fl., Griffith 365 = K.D. 4273, K.

Cinnadenia malayana Kostermans, sp. nov.

Arbor, ramulis glabris. Folia alternantia, coriacea, glabra, oblonga, attenuata, utrinque minute prominulo-reticulata, supra nervis prominulis, subtus concoloria, nervis pluribus tenuibus erecto-patentibus prominutis, petiolo tenue. Racemi axillares, glabri, breves, pauci-flori, graciles, pedicellis gracilibus longis. Flores glabri, perianthii tuba parvo, iato, tepalis late ovatis, reflexis, coriaceti, glabris, staminibus 6 × 3, glabris, brevibus, antheris oblongis, 4-locellatis, introrsum, loculis magnis latere tangentibus, filamentis brevissimis, glandulis parvis sessilibus, basalibus munitis, ovario subgloboso, stylo brevi, stigmate parvo, peltato.

TYPUS : F.R.I. 14593, L.

Tree, 8 m high and 10 cm diam., bole tapering, bark yellowish brown; live bark pale brown. Wood yellowish. Branchlets rather slender,

smooth, glabrous. Terminal bud slender with few bud scales, glabrous except the margins. Leaves spirally arranged, glabrous, coriaceous, oblong, $4 \times 13.5 \times 17$ cm, both ends tapered, obscurely acuminate, base acute, both sides concolorous, rather glossy, densely, minutely, smoothly reticulate, above midrib and the slender nerves prominulous, beneath midrib prominent, the very slender, erect-patent, up to 15 pairs of nerves prominulous. Petioles slender, 10 mm long.

Inflorescences axillary, glabrous, few-flowered, racemiform, up to 2 cm long, with slender peduncle, often bearing 3-5 flowers apically, bracts caducous. Flowers glabrous, perianth tube wide, shallow, 0.5 mm high. Tepals fleshy, reflexed, ovate, acutish, veined, 3 mm long. Stamens 18 in 6 whorls, subequal, glabrous, 1.5 mm long; anthers oblong, 4-celled, cells touching tangentially, large, all introrse, filaments very short, rather broad, basal glands small, sessile (all stamens), ovary globose, style 1 mm, stigma small, peltate.

NOTE: Closely related to *C. paniculata* (Hook. f.) Kosterm., but the leaves oblong, narrower, not pitted but reticulate, the number of nerves larger and not impressed. The flowers are alike.

MALAY PENINSULA : Gunung Angsi, Comp. 8, Pedas, Negri Sembilan, hillside, alt. 500 m, Febr., fl., F.R.I. 14593, KEP, L.

Dehaasia assamica Kostermans, sp. nov.

Arbor, ramulis hornotinis dense minutissime adpresso-pilosis, gemmis terminalibus dense minuteque pilasis. Folia alternantia, chartacea, glabra, oblanceolato-ablonga, apice obtusa et apiculata, basin versus sensim attenuata, utrinque dense minuteque reticulata, supra nervo mediano impresso, subtus valde prominenti, nervis laterallibus erecto-patentibus, arcuatis, prominulis, petiolo longo. Fructus sessiles, solitarii, globosi, pedicellis longis, incrassatis.

TYPUS : Thakur Rup Chand 2778, L.

Tree, 45 cm diam. Branches grey, rough, lenticellate, the apical part densely, minutely adpressed, brown pilose. Terminal bud densely, minutely pilose. Leaves spirally arranged, aggregate, chartaceous, glabrous, oblanceolate-oblong, $3.5 \times 13.5-5 \times 20$ cm, obtuse and apiculate, base tapered, acute, both surfaces densely, minutely reticulate, above midrib slender, impressed, the nerves very slender, slightly prominulous, below midrib strongly prominent, the 9-12 pairs of erect-patent nerves slender, arcuate, prominent. Petioles slender, 1.5-2 cm long, concave above.

The solitary fruit sessile on an upwards slightly thickened, 5 cm long, reddish pedicel, the fruit globose, 1.5 cm diam.

NOTE: The fruiting pedicel bears near its apex some inexplicable scars.

This is the first record of *Dehaasia* from Assam.

ASSAM : Garo Hills near Nokrek, alt. 1300 m, Aug., fr., *Thakur Rup Chand* 2778, L.

***Persea yunnanensis* (Lec.) Kostermans**

- Reinwardtia 6 : 188 (1962); Bibl. Laur. : 1263 (1964),
— *Machilus yunnanensis* Lecomte, Nouv. Arch. Mus., ser. 5, 5 : 100 (1913); Notul. syst. 3 : 12 (1914); Léveillé, Cat. Pl. Yunnan : 151 (1916); Handel-Mazzetti, Symbol. Sin. 7 : 252 (1931); Liou Ho, Laur. Chine et Indo-ch. 58 (1932 and 1934); T. T. Yu, Yunnan bot. Inst. I (1) : 26 (1941), Chinese; Wu, C. Y., List Spermatophyt. Yunnan 1 : 25 (1959), Chinese; KOSTERMANS, l.c. 194 and 931.
— *Machilus yunnanensis* var. *duclouxii* Lecomte, l.c.; Liou Ho, l.c.; Wu, l.c.; Fl. Dendrol. China, ed. 2 : 24 (1957), Chinese; Wang C. W., Forests China 150 (1961); KOSTERMANS, Bibl. 931 (1964); typus : *Ducloux* 2566, P.
— *Machilus bracteata* Lecomte, l.c. : 101; Notul. Syst., l.c.; Léveillé, l.c.; Smith, Notes Bot. Gard. Edinb. 17 : 10 (1929), 294 (1930); Liou Ho, l.c.; Lee, For. Bot. China: 511 (1935); T. T. Yu, l.c. : 25; Wu, l.c. : 24; Wang C. W., l.c. 112, 114, 115, 126; KOSTERMANS, Reinwardtia, l.c. : 191; Bibl., l.c. : 903.
— *Persea bracteata* (Lec.) KOSTERMANS, Reinwardtia, l.c. : 185; Bibl., l.c. : 1207; typus : *Ducloux* 7591; paralypus : *Ducloux* 7608, 7620, P.

TYPUS : *Delavay* 4360, P.

As LECOMTE himself had already stated, the two species are closely allied, the distinction as made by LECOMTE has not even varietal value.

CHINA : YUNNAN : Yo-lin-chan near Song Min, fl., *Ducloux* 7591, L, P; woods of Che-tong near Ta-Pin-tze, July, fr., *Delavay* 2830, L, P; near Ta-Pin-tze, on the left bank of the Che tong rivulet at Moa-longtan, May, fl., *Ducloux* 2830, L, P; near Yunnan Sin, July, fl., *Ducloux* 2566 L, P; E. Yunnan, summit of Lo Shieuh Mt., tree 8 m, July, fl., McLaren's Coll. U 209, C; Yao-Chou Mt., July, fl., McLaren's Coll. 185 F, C; Szemao, alt. 1500 m, fl., Henry 11960, K; Yunnan, fl., Forrest 12541, K.

***Potameia kwangsiensis* Kostermans, sp. nov.**

Arbor mediocris, ramulis et gemmis terminalibus glabris. Folia alternantia, subcoriacea, elliptica, acuminata, basi acuta, supra sublaevia, nitida, nervis impressis, subtus pallidioribus, nervo mediano prominenti, nervis lateralis tenuibus, erecto-patentibus, marginem versus arcuatis, prominulis, venis secundariis sat obscuris, parallelis, tenue connectitis, petiolo tenu. Inflorescentiae axillares vel ad basin ramulorum hornotinorum, glabri, filiformes, vix vel non ramosse, pauciflores, bracteis deciduis. Flores minuti, glabri, tubo profundo, suburceolato, tepalibus 4, ovariis, acutis, antheris subscissibus, glabris, minutis, loculis 2, introrsis, glandulis basaliibus parvis, globosis, staminodis 4, stipitiformibus, parte basali dense villosis, ovario glabro, tenui, ellipsoidea, stylo parvo, obconico, stigmate inconspicui. Fructus globosi, leves, pedicello obconico, tepalis incrassatis persistentibus, minutis.

TYPUS : W. T. Tsang 22586, P.

Tree, 6 m high. Branchlets slender, glabrous, glossy, terminal bud minute, pointed, glabrous. Leaves spirally arranged, subcoriaceous, glabrous, elliptic, $6 \times 16\text{--}2.5 \times 7$ cm, acuminate with slender tip, base acute; above smooth, glossy, midrib and nerves slightly impressed, some-

times the parallel secundary nerves faintly visible, beneath paler, glossy, midrib prominent, nerves slender, 5-6 pairs, erect-patent, prominulous, arcuate towards the margin, connected by faint, parallel, numerous veinlets, reticulation obscure. Petiole slender, 1-1.5 cm long, flat above. Inflorescences filiform, glabrous, few-flowered, hardly or not branched (branches filiform, up to 5 m long), in the axils of reduced leaflets (1×3.5 cm) of thin branchlets, up to 4 cm long, or at the base of young shoots, up to 3 cm long. Pedicels filiform, 6-7 mm long, bracts caducous. Flowers 1.5 mm long, glabrous, tube 0.75 mm, deep, sub-urceolate, rather thick-walled. Tepals 4, erect, broadly ovate, acute, 0.75 mm. Anthers 4, 2-celled, sessile (filament short, broad, adnate to the tepals), ovate-orbicular, rather thick, 0.25 mm, the cells large, introrse, with 2 flaps; basal glands minute, globose. Staminodes 2 pairs, opposite the anthers, stipitate, almost as long as the anthers (inner pair shorter), basal part densely villous. Ovary slender, ellipsoid, glabrous, 1.5 mm long, merging into a short, conical style with inconspicuous pointed stigma. Fruit solitary on a 4 cm long infructescence peduncle, globose, smooth, glossy, up to 2 cm diam., pericarp rather hard, 1.5 mm thick, fruiting calyx not differentiated from the obconical, 1 cm long pedicel, tepals not enlarged, hardened, subpersistent.

CHINA : KWANGSI. Kwangtung border, Shang-She Distr., Shap Maan Taai Shan, near village Ho Lung, fairly common in thicket, dry clay soil, June, fl., fr., W. T. Tsang 22586, AA, P.

An interesting species, the third known from mainland Asia (I have reduced *P. lotungensis* from Hainan to *P. sinensis*). It has all the characters of the other two species of *Potameia*, but is completely glabrous, but the anthers are 2-celled with 2 flaps, the only exception in the mainly Madagascar genus *Potameia*. The other two have one flap, slightly incised in the centre.